Attorney Docket: 2368.129

- with a force producing device (35, 72, 73) for producing a force for lifting or lowering the support device (2, 3B, 5) and

- with a force transmission device for transmitting the force from the force producing device to the support device

wherein

- the force transmission device includes at least one lever (25a, 25b), which on one side (29a, 29b) is coupled to be essentially horizontally displaceably guided with the force producing device (35, 72, 73) and on the other side (30a, 30b) is coupled with the support device (2, 3B, 5) and is guided for essentially vertical displacement.
- 2. Lift device according to Claim 1, wherein the force transmission device includes two levers (25a, 25b), which are rotatably mounted (29a, 29b) in parallel arrangement respectively on one end to at least one slide bar (16a, 16b) guided for horizontal displacement and on the other end are rotatably mounted (29a, 29b) to at least one lift bar (17a, 17b) guided for vertical displacement parallel to the slide bar (16a, 16b).
- 3. Lift device according to Claim 2, wherein two slide bars (16a, 16b) are provided oriented parallel and bracketing the two levers (25a, 25b).

U.S. Application No.: 10/073,472 SECOND PRELIMINARY AMENDMENT

Attorney Docket: 2368.129

- 20. Lift device according to Claim 2, wherein two lift bars (17a, 17b) are provided in parallel orientation and bracketing the two levers (25a, 25b).
- 21. Lift device according to Claim 2, wherein the slide bars (16a, 16b) are associated with rollers (22a, 22b) for horizontal guidance on suitable guide bars (27, 27a, 27b).
- 22. Lift device according to Claim 21, wherein the rollers (22a, 22b) are mounted rotatably in the slide bars (16a, 16b).
- 23. Lift device according to Claim 21, wherein the rollers are mounted rotatably in the guide bars.
- 24. Lift device according to Claim 2, wherein the lift bars (17a, 17b) are provided with guide rollers (22a, 22b) for vertical guidance on suitable guide elements (13a, 13b).
- 25. Lift device according to Claim 24, wherein the guide elements (13a, 13b) are connected essentially rigidly with the lift bars (17a, 17b).
- 26. Lift device according to Claim 1, wherein slide blocks (15a, 15b) are provided for guiding the force transmission device (16a, 16b, 17a, 17b, 25a, 25b) in the sideways direction.
- 27. Lift device according to Claim 1, wherein the force transmission device includes at least one pneumatic device (72, 73).

U.S. Application No.: 10/073,472 SECOND PRELIMINARY AMENDMENT

Attorney Docket: 2368.129

- 28. Lift device according to Claim 1, wherein the force transmission device includes at least one hydraulic device.
- 29. Lift device according to Claim 1, wherein the force transmission device includes a linear motor.
- 30. Lift device according to Claim 1, wherein the force transmission device includes at least one (rotation-) motor drive (35) and a conversion device for converting the rotational movement of the motor drive (35) into a horizontal linear movement.
- 31. Lift device according to Claim 30, wherein an eccentric disk, a crank disk (38) or the like is provided, which is driveable by a motor drive (35) and which is in operable association with one end (29a, 29b) of the lever (25a, 25b).
- 32. Lift device according to Claim 31, wherein the eccentric disk, the crank disk (38) or the like carries an eccentric pin, crank pin (38a) or the like eccentric to the drive axis of the motor drive (35), which engages in a linkage mount (37a) provided on the one side of a crank (20), wherein a pin (36) provided on the one side of the slide bar(s) (16a, 16b) engages in a linkage mount (37b) provided on the other side of the crank (20).
- 33. Lift device according to Claim 31, wherein the motor drive (35) is provided with a pressure or pull spring (18), of which the spring effect supports the start-up of the motor drive (35) at least during lifting of the support device (2, 3B, 5).